



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,656

09/27/2006

Domenico Bruzzi

07587.0295USWO

2301

23552 7590 11/13/2008  
MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER

BELLAMY, TAMIKO D

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

11/13/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,656	<b>Applicant(s)</b> BRUZZI, DOMENICO	
	<b>Examiner</b> TAMIKO D. BELLAMY	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Preliminary amendment dated 10/20/08 has been received and entered. Claims 14-17 have been canceled. Claims 1-13 are currently pending.

### ***Drawings***

2. The drawings were received on 10/20/08. These drawings are accepted.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8, 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinoshita et al. (JP11-190686A).

Re claim 1, as depicted in figs. 1 and 2, Kinoshita et al. discloses a first tubular element (e.g., area with conduit defining the sample gas passage (22)) positioned within the interior of a process environment (flue) (Par. 12). Kinoshita et al. discloses the first tubular element having one end as a gas aspiration opening (e.g., far left end of sampling pipe 21) and defining an internal cavity (Par. 12). Kinoshita et al. discloses a second tubular element (e.g., purge nozzle 39) extending within the cavity (22) of the first tubular element (e.g., area with conduit defining the sample gas passage (22)). Kinoshita et al. discloses the second tubular element (purge nozzle 39) being operable to inject the gaseous fluid in to the interior cavity (22) towards the aspiration opening (e.g., far left end of sampling pipe 21) and into the process environment (e.g., flue) (Pars 12-13).

Art Unit: 2856

Kinoshita et al. discloses an aspiration means (e.g., combination of pump heating lead pipe (45) and pump (85)) (Par. 22). Kinoshita et al. discloses a take off means (e.g., combination of conduit between (79) and pump (85)) connected to the aspiration means (75, 85) for taking off a fraction of the gaseous fluid; and the take off (e.g., combination of conduit between (79) and pump (85)) further connected to an analyzer means (87) (Pars. 22-23). Kinoshita et al. discloses a re-injection means (39) (Pars. 23- 26). As depicted in fig. 2, Kinoshita et al. discloses a compressor means (e.g., pump 85) having an aspiration side and a delivery side. Kinoshita et al. discloses the first tubular element (e.g., area with conduit defining the sample gas passage (22)) fluidly connected to control valves. Kinoshita et al. discloses the second tubular element (39) in fluid communication with the delivery side of the compressor (e.g., pump 85) through a reservoir (e.g., Kula (79) removing moisture of gas sample). Kinoshita et al. discloses a back washing condition (Pars. 22-23).

Re claim 2, as depicted in fig. 2, Kinoshita et al. discloses the second tubular element (e.g., purge nozzle 39) disposed a process environment side of the aspiration opening (e.g., far left end of sampling pipe 21).

Re claim 3, as depicted in fig. 2, Kinoshita et al. discloses the first tubular element (e.g., area with conduit defining the sample gas passage (22)) and the second tubular element (purge nozzle 39) are coaxial.

Re claim 4, as depicted in fig. 2, Kinoshita et al. discloses connector elements (e.g., combination of flange (37) with bolts) renders the second tubular element (e.g., purge nozzle 39) slidable (inserted) with respect to the first tubular element (e.g., area

Art Unit: 2856

with conduit defining the sample gas passage (22)) and the second tubular element (purge nozzle 39) (Par. 13).

Re claim 5, as depicted in fig. 2, Kinoshita et al. discloses a cooling jacket (e.g., sampling pipe 21) disposed around the first tubular element (e.g., area with conduit defining the sample gas passage (22)) and the second tubular element (purge nozzle 39).

Re claims 6 and 7, as depicted in figs. 2 and 3, Kinoshita et al. discloses the cooling jacket (21/121) is disposed in such a way to define an inner space interposed between the jacket (21/121) and the first tubular element (e.g., area with conduit defining the sample gas passage (22/122)).

Re claim 8, as depicted in fig. 2, Kinoshita et al. discloses the cooling jacket (21) is connected in fluid communication with a low temperature refrigerator (e.g., Kula 79).

Re claim 10, Kinoshita et al. discloses a decanter means (e.g., dust collector 41) and a dryer means (e.g., Kula 79) downstream of the probe (21) in such a way to reduce dust (Par. 14).

Re claims 12 and 13, as depicted in figs. 1 and 2, Kinoshita et al. discloses a first tubular element (e.g., area with conduit defining the sample gas passage (22)) positioned within the interior of a process environment (flue) (Par. 12). Kinoshita et al. discloses the first tubular element having one end as a gas aspiration opening (e.g., far left end of sampling pipe 21) and defining an internal cavity (Par. 12). Kinoshita et al. discloses a second tubular element (e.g., purge nozzle 39) extending within the cavity (22) of the first tubular element (e.g., area with conduit defining the sample gas passage (22)). Kinoshita et al. discloses the second tubular element (purge nozzle 39) being operable to

Art Unit: 2856

inject the gaseous fluid in to the interior cavity (22) towards the aspiration opening (e.g., far left end of sampling pipe 21) and into the process environment (e.g., flue) (Pars 12-13). Kinoshita et al. discloses aspirating a gaseous fluid (e.g., combination of pump heating lead pipe (45) and pump (85)) (Par. 22). Kinoshita et al. discloses a taking off (e.g., combination of conduit between (79) and pump (85)) for taking off a fraction of the gaseous fluid; and the take off (e.g., combination of conduit between (79) and pump (85)) further connected to an analyzer means (87) (Pars. 22-23). Kinoshita et al. discloses a re-injection means (39) (Pars. 23- 26). Kinoshita et al. discloses a back washing step (Pars. 22-23).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. (JP11-190686A) in view of Sellin (3,220,385).

Re claim 9, as depicted in fig. 2, Kinoshita et al. discloses an extracting probe (21) with an aspiration opening (e.g., far left end of sample probe 21). Kinoshita et al. lacks the detail of a shielding element in proximity to the aspiration opening. As depicted in fig. 1, Sellin discloses a protective cap (11) placed at the upper end of an outer tube (13) having an inner tube (4a) (Col. 5, lines 3-11). Although Sellin's tube device (13, 4a) is used to heat gas or liquids in a furnace and is non-analogous art, the court held In re

Beattie, 974 F.2d 1009, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992), that **as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole**, the law does not require that the references be combined for the reasons contemplated by the inventor." Therefore, to modify Kinoshita et al. by employing a shielding cap would have been obvious to one of ordinary skill in the art at the time of the invention since Sellin teaches a protective cap having these design characteristics. The skilled artisan would be motivated to combine the teachings of Kinoshita et al. and Sellin since Kinoshita et al. states that his invention is applicable to a gas sampling probe and Sellin is only used to make use of placing a protective cap on the end of the tubular device for the sole purpose of protecting an distal end of the tubular device from ash deposits. This protective cap solves the same problem as the claim, which, is to provide a barrier against impurities settling into the probe.

#### *Allowable Subject Matter*

7. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: a vacuumeter connected to the first tubular element of the probe and a manometer connected to the second tubular element of the probe. Kinoshita et al., closest to related art, teaches in order to protect the sampling probe (21) the pressure is supervised with a cooling-water pressure measurement (57) (Par. 19). Kinoshita et al. does not teach a vacuumeter connected to the first

Art Unit: 2856

tubular element of the probe and a manometer connected to the second tubular element of the probe.

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMIKO D. BELLAMY whose telephone number is (571)272-2190. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamiko Bellamy

/TB/

November 6, 2008

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856